



**NCTA**

NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION

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JAN 29 2003

NEAL M. GOLDBERG GENERAL COUNSEL

1724 MASSACHUSETTS AVE N.W. WASHINGTON, O.C. 20036-1903

TEL 202 775 3664 FAX 202 775 3603

January 21, 2003

W. Kenneth Ferree  
Chief, Media Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W. - Room 3-C740  
Washington, D.C. 20554

Re: Commercial Availability of Navigation Devices (CS Docket No. 97-80)

Dear Mr. Ferree:

On January 7, 2003, I submitted to you two declarations for inclusion in the above-referenced proceeding, one of which was in facsimile form. Enclosed is an original signed copy of that declaration.

Respectfully submitted,

Neal M. Goldberg

Attachment

cc: Marlene H. Dortch, Secretary (for inclusion in CS Docket No. 97-80)  
Chairman Michael K. Powell  
Commissioner Kathleen Q. Abemathy  
Commissioner Michael J. Copps  
Commissioner Kevin J. Martin  
Commissioner Jonathan S. Adelstein  
William Johnson, Deputy Chief, Media Bureau  
Deborah Klein, Chief of Staff, Media Bureau  
Rick Chessen, Associate Chief, Media Bureau  
Thomas Horan, Senior Legal Advisor, Media Bureau  
Mary Beth Murphy, Chief, Policy Division, Media Bureau  
Steven A. Broecker, Deputy Chief, Policy Division, Media Bureau  
Susan Mort, Attorney Advisor, Media Bureau  
John P. Wong, Chief, Engineering Division, Media Bureau  
Bruce Franca, Deputy Chief, Office of Engineering & Technology  
Michael Lance, Deputy Chief, Engineering Division, Media Bureau  
Robert M. Pepper, Chief, Office of Plans & Policy  
Jonathan D. Levy, Deputy Chief Economist, Office of Plans & Policy  
Amy Nathan, Senior Counsel, Office of Plans & Policy

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Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Section 304 of the	)	CS Docket No. 97-80
Telecommunications Act of 1996	)	
	)	
Commercial Availability of Navigation Devices	)	

**DECLARATION OF William E. Wall**

I, William E. Wall, Ph.D., do hereby declare as follows:

1. I am Technical Director, Subscriber Networks for Scientific-Atlanta, Inc., 5030 Sugarloaf Parkway, Lawrenceville, Georgia 30044.

2. As Technical Director of Subscriber Networks, and Previously as Chief Scientist of Scientific-Atlanta's digital development program I have been directly involved in the development of digital settops and conditional access systems for cable applications. I hold several patents in these areas. I participated in the development of conditional access systems for cable and satellite as early as 1983. I have actively participated in the development of SCTE digital video standards, including the Point-of-Deployment Interface specification, where I was an original contributing author. I developed much of the technology embodied in the DAVIC out-of-band transmission specification, later adopted as SCTE 55-2. I currently represent Scientific-Atlanta in both SCTE and ATSC standards bodies.

3. I have prepared and executed this declaration in order to respond to certain assertions made in the declaration of Mr. Jack W. Chaney ("Chaney Declaration"), filed in the above-captioned proceeding on August 15, 2002 by the Consumer Electronics Retailers Coalition, regarding the cost of implementing the ban on cable operator deployment of "integrated" (i.e., embedded security) navigation devices, which is scheduled to be imposed as of January 1, 2005.

4. On August 2, 2002, the National Cable & Telecommunications Association ("NCTA") filed a report indicating that the cost to cable operators of a separate security Point of Deployment module ("POD") and associated "Host" device would be approximately \$72 to \$93 more per unit than the cost of an integrated set-top box with the same functionality. See NCTA Cost Report, filed Aug. 2, 2002, CS Docket No. 97-80 ("NCTA Report") at 6. The cost data collected by NCTA was based on consultations with manufacturers, such as Scientific-Atlanta, that have designed and developed OpenCable PODs and Host devices. See id. at 5.

5. Based on Scientific-Atlanta's experience and expertise in the design and development of both integrated set-top devices and separate security Opencable PODs and Host products, I believe that the range of costs identified in the NCTA Report represents a reasonable, good faith estimate of the added costs to cable operators and subscribers arising from the ban on integrated devices. I have reviewed the cost estimates provided in Mr. Chaney's declaration, and have concluded that for several reasons they are not credible and provide no valid basis for questioning the cost data reflected in the NCTA Report.

6. As an initial matter, the cost figures cited by Mr. Chaney as the basis for his estimates relate solely to the cost of a separate security "smart card." At the end of his declaration, Mr. Chaney appears to acknowledge that, in addition to the cost of the separate security device (in this case, the Opencable POD module), there are additional costs for the "Host interface" that must also be considered. See Chaney Declaration at 2. However, the declaration contains no data on the cost of this interface.

7. Similarly, his cost estimates do not factor in the additional costs arising from the duplicative hardware and software included in Opencable Host devices, as described in NCTA's Report at 5-6. Mr. Chaney's failure to take these costs (which are not incurred in the manufacture of integrated devices) into account makes his estimates at best incomplete and clearly unreliable as a basis for accurately determining the added costs that would be imposed if consumers are forced to obtain a POD-Host combination, in lieu of an integrated set-top device.

8. Mr. Chaney's estimates of the cost of the POD module itself, which is the source of most of the additional costs arising from the ban on integrated devices, are also flawed and unreliable in several respects. Most notably, these estimates are based entirely on Mr. Chaney's unsubstantiated assertions regarding the cost of manufacturing "smart cards" based on the National Renewable Security Standard - Part A ("NRSS Part A") specification. However, cost data for NRSS Part A smart cards cannot provide a valid basis for determining the added costs associated with the development and production of Opencable POD modules, which are based on the NRSS Part B specification (EIA-679-Part B).

9. Mr. Chaney's declaration concedes, but then ignores, this distinction and instead proceeds from the apparent assumption that the asserted costs for NRSS Part A smart cards provide reliable "guidance" for determining Opencable POD costs. See Chaney Declaration at 1. This assumption is plainly flawed, given the substantial physical and functional differences between the two devices, which make the NRSS Part A smart card cost data cited by Mr. Chaney clearly inappropriate as a basis for accurately estimating POD-related costs.

10. Of particular note, the NRSS Part B specification, on which the Opencable POD-Host specification was based, utilizes a PCMCIA form factor that is substantially more complex, with 68 electrical contacts, than the physical form factor employed in the NRSS Part A specification, which has only eight contacts. The more sophisticated PCMCIA form factor requires greater memory, a more robust CPU, more complex wiring, and other features that significantly increase the cost of devices manufactured to meet the NRSS-B specification, as compared with "smart card" devices manufactured to meet the less complex NRSS-A specification.

11. It is also important to note that in addition to the added cost arising from the differences between NRSS Part A and NRSS Part B devices described above, the Opencable POD-Host specification significantly extends the NRSS Part B specification to include enhanced functionality in a number of areas (e.g., out-of-band signal processing, firmware control, message extraction, authorization, and copy protection), in order to ensure the security of advanced digital one-way and interactive cable services, including HDTV, impulse pay-per-view, and video-on-demand. These enhancements further add to the cost of an Opencable POD, as compared with an NRSS Part A smart card, or even with less complex NRSS Part B devices.

12. For the foregoing reasons, Mr. Chaney's estimates of Opencable POD costs, based on his asserted cost figures for NRSS Part A smart cards, clearly cannot provide a reliable basis for estimating the additional costs to cable operators and consumers of implementing the ban on integrated set-top boxes.

13. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and accurate.

A handwritten signature in black ink, reading "William E. Wall", written over a horizontal line.

William E. Wall

December 20, 2002